

CLAIMS

1. A pneumatic tire, comprising a carcass containing at least one toroidal carcass ply, a tread rubber arranged radially outwardly on the crown portion of the carcass, and a belt consisting of at least one belt layer arranged between the tread rubber and the carcass, said belt layer containing cords extending in a direction inclined from the tire's circumferential direction, wherein at least one circumferential reinforcement layer containing meandering cords extending generally along the tire's circumferential direction in a wavy or zigzag shape is provided radially outwardly or inwardly on the belt or between the belt layers, and at least one transversal reinforcement layer containing straight cords extending generally perpendicular to the tire's circumferential direction is provided on the position radially outwardly adjacent to the crown portion of the carcass.

2. The pneumatic tire according to claim 1, wherein the inclined angle of the straight cords of the transversal reinforcement layer with respect to the tire's circumferential direction is within a range of 90 ± 20 degrees.

3. The pneumatic tire according to claim 1 or 2, wherein the sum of the transversal strengths of the carcass, the transversal reinforcement layer, the circumferential reinforcement layer and the belt including their coating rubbers is 30 kN/25mm or more at the tire's equatorial plane.

4. The pneumatic tire according to any one of claims 1 to 3, wherein the ratio of the sum of the transversal strengths of the carcass, the transversal reinforcement layer, the circumferential layer and the belt including their coating rubbers to the sum of the circumferential strengths of them is 0.55 or more at the tire's equatorial plane.

5. The pneumatic tire according to any one of claims 1 to 4, wherein the belt consists of one belt layer, and the inclined angle of the cords of the belt layer with respect to the tire's circumferential direction is 10 to 60 degrees.

6. The pneumatic tire according to any one of claims 1 to 4, wherein the belt consists of two or more belt layers; the cords of the adjacent belt layers cross each other; the inclined angle of the cords of the belt layers with respect to the tire's circumferential direction is 10 to 60 degrees; and the cords of the radially adjacent belt layers extend in the mutually opposite directions with respect to the

tire's circumferential direction.

7. The pneumatic tire according to any one of claims 1 to 6, wherein the width of the transversal reinforcement layer is 0.35 times or more as large as the tread width.

8. The pneumatic tire according to any one of claims 1 to 7, wherein the width of the transversal reinforcement layer is 0.95 times or less as large as the tread width.

9. The pneumatic tire according to any one of claims 1 to 8, wherein the straight cords constituting the transversal reinforcement layer are non-extensible cords.

10. The pneumatic tire according to any one of claims 1 to 8, wherein the straight cords constituting the transversal reinforcement layer are extensible cords having an initial elongation of 0.2 % or more.

11. The pneumatic tire according to claim 10, wherein the straight cords constituting the transversal reinforcement layer are extensible organic fiber cords.

12. The pneumatic tire according to claim 10, wherein the straight cords constituting the transversal reinforcement layer are extensible steel cords.